

Notice of Allowability**Application No.**

10/553,679

Applicant(s)

TASS, PETER

Examiner

George R. Evanisko

Art Unit

3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the RCE filed 8/16/10.
2. ☒ The allowed claim(s) is/are 78-92 and 95-99.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date ____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Paul Maier on 9/10/10.

The application has been amended as follows:

In claim 78, the next to last line, "approximately" has been deleted.

In claim 84, the next to last line, "approximately" has been deleted.

Claim 91 has been amended to read as follows

--91. (Currently Amended) A device for desynchronizing neuronal brain activity involving a neuron population firing in a synchronized manner at a pathological frequency, the device comprising:

a plurality of pairs of electrodes configured to stimulate a plurality of neuron subpopulations, respectively, of the neuron population, wherein each electrode of the plurality of pairs of electrodes is configured to generate a burst of electrical pulses to reset the respective neuron subpopulation; and

a control unit configured to control the plurality of pairs of electrodes such that the pairs of electrodes generate the bursts of electrical pulses in sequence having a predetermined time shift with respect to the bursts generated from the other pairs of electrodes in the sequence such that each respective pair of neuron subpopulations are reset

at a different point in time and fire out of phase with the other subpopulations, wherein, for each electrode of the pair of electrodes, the control unit is configured to control each electrode of the pair to simultaneously output identical bursts of pulses having opposite polarities from the other electrode of the pair, and

wherein the predetermined time shift is based on the pathological frequency.--

Claim 92 has been amended to read as follows

92. (Currently Amended) A method of desynchronizing neuronal brain activity involving a neuron population firing in a synchronized manner at a pathological frequency, the method comprising:

providing a plurality of pairs of electrodes for stimulating a plurality of neuron subpopulations, respectively, of the neuron population;

predetermining a time shift based on the pathological frequency;

controlling the plurality of pairs of electrodes such that each pair of electrodes generates a burst of electrical pulses for the respective neuron subpopulations in a sequential order having the predetermined time shift with respect to the bursts generated from the other pairs of electrodes in the sequence in order to reset the respective neuron subpopulations at a different point in time to fire out of phase with the other subpopulations; and

for each electrode of the pair of electrodes, simultaneously outputting from each electrode of the pair identical bursts of pulses having opposite polarities from the other electrode of the pair.--

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George R. Evanisko whose telephone number is 571 272 4945. The examiner can normally be reached on M-F 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Niketa Patel can be reached on 571 272 4156. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George R Evanisko/
Primary Examiner, Art Unit 3762

GRE
9/10/10